WHAT IS CLAIMED IS:

1. An optical filter which is used in an optical apparatus comprising a light modulator for modulating light beams from a light source in accordance with image information to form an optical image, and which is disposed downstream from the light modulator in a light path, the optical filter comprising:

a substrate; and

an optical conversion film,

wherein the optical conversion film is disposed on a light-incident surface of the substrate,

wherein the optical conversion film comprises thin films of two types having different refractive indices and being alternately stacked, and

wherein the optical conversion film is inclined with respect to the substrate by being continuously thinner from one end to the other end.

2. An optical filter according to Claim 1, one of the two types of thin films is formed of tantalum pentoxide, and the other is formed of silicon dioxide.

3. An optical filter according to Claim 1, wherein one of the two types of thin films is formed of zirconium dioxide, and the other is formed of silicon dioxide.

4. An optical filter according to Claim 1, further comprising a light-incident surface having a retardation film disposed adjacent thereto.

5. An optical device comprising:

a light modulator for modulating light beams from a light source in accordance with image information to form an optical image;

a projection optical system for enlarging and projecting the optical image formed at the light modulator; and

the optical filter of Claim 1.

6. An optical device according to Claim 5, wherein the projection optical system is used for tilting-and-shifting projection in which a central axis of an image-formation area of the light modulator is displaced from an optical axis of the projection optical system, and wherein the optical conversion film becomes continuously thinner in a tilting-and-shifting direction.

7. An optical device according to Claim 6, wherein an end, disposed in the tilting-and-shifting direction from the optical axis of the projection optical system, of the optical filter is tilted towards the projection optical system.

8. A projector comprising the optical filter of Claim 1.

9. An optical device comprising:

a light modulator for modulating light beams from a light source in accordance with image information to form an optical image;

a projection optical system for enlarging and projecting the optical image formed at the light modulator; and

an optical filter which is used in an optical apparatus comprising the light modulator, and which is disposed downstream from the light modulator in a light path, the optical filter comprising:

a substrate; and

an optical conversion film,

wherein the optical conversion film is disposed on a light-incident surface of the substrate,

wherein the optical conversion film comprises thin films of two types having different refractive indices and being alternately stacked, and

wherein the optical filter is tilted for an optical axis of the projection optical system.

10. A projector comprising the optical device of Claim 9.

11. A projector comprising the optical device of Claim 5.